

# Electrical Shorts



**Development Services  
Electrical Team**

Issue 2

## Public Hearing on Adoption of 2008 NEC

2008 NEC Review Completed:

The Electrical Supervisory Board "NEC Review Committee" along with DSD staff have completed the initial review process for recommended adoption of the 2008 edition of the National Electrical Code and the technical code provisions/amendments in Chapter 10 of City Code. A public hearing is scheduled for the Board's regularly scheduled meeting in September.

The goal will then be for the Electrical Board along with staff to pass along recommendation to City Council to adopt the new edition of the NEC sometime in October.

The public hearing and regularly scheduled Electrical Board meeting will be held on September 9, 2008 at 9:30 AM in the Board Room located on the 1st floor of our building.

The technical code provisions/amendments can be found by clicking on the current news item tab on the [electrical home page](#) of the Development and Planning Services Department website.

For more information, contact Yvonne Medrano, (210) 207-0158,  
[Yvonne.M.medrano@sanantonio.gov](mailto:Yvonne.M.medrano@sanantonio.gov)

## Inspector Assignment (Area) Maps Updated

Electrical Inspector Areas and Contact Information Updated:

We have completed the revisions to our inspector assignment maps for residential and commercial. The maps include the currently assigned areas for each inspector along with their phone numbers. As Chief Electrical Inspector, I am fully aware that there are many challenges faced by you as customers/contractors that requires effective communication between you and my inspectors. With the information found on these maps, the contractor can have the necessary information to know which inspector is assigned to a particular project based on its location and have the updated contact information. Feel free to contact the field inspector for your particular project to discuss any issue that you feel is needed for that project. We are committed to this important variable in our industry and will do what we can to help you meet them successfully.

The inspector maps can be found by visiting the [Development Services Electrical Division](#) homepage. If you should have any problems in locating the maps or printing them out, feel free to come in and visit our One Stop Center located at 1901 S. Alamo and we will be glad to print out a copy for you.

For more information, contact senior inspectors, John Raney, (210) 215-7768,  
[john.raney@sanantonio.gov](mailto:john.raney@sanantonio.gov) or George Moreno (210) 260-3905, [george.moreno@sanantonio.gov](mailto:george.moreno@sanantonio.gov)

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**Questions /comments:** can be directed to Chief Electrical Inspector, Ray Martinez (210) 207-8286 or [ray.martinez@sanantonio.gov](mailto:ray.martinez@sanantonio.gov)

### Frequently Asked Code Question:

**Question -** When are service disconnects required to be installed on the exterior of a building or structure?

**Answer-** As per article 230.70 (A) of the 2005 NEC; service disconnects shall be installed at a readily accessible location either outside of a building or structure or inside nearest the point of entrance of the service conductors.

### Chapter 10 City Code Amendment:

Section 10-93 (2) (b) of Chapter 10 City Code amends article 230.70 (A) of the 2005 NEC by requiring all service disconnects on residential structures to be located on the exterior of the residence.

# Review Code Changes with the Inspectors

## Review of 2008 NEC Changes

As Chief Electrical Inspector, I would like to invite anyone interested to join us for a couple of hours of review and discussion of some of the more prominent code changes that have been introduced in the 2008 edition of the NEC. We will be hosting two separate meetings in September that will be aimed at each main segment of our industry (residential and commercial). The sessions will not be long enough obviously to cover all the changes but will give us an opportunity to get more familiar with some of the major changes and also serve as a way of introducing ourselves as electrical inspectors for our department.

There are many key changes in the 2008 edition of the NEC that will have a great impact on our industry. Reviewing them in advance will help benefit all who are directly or indirectly involved in the electrical industry.

The meetings will be held in the Board Room on the 1st floor of our One Stop Building at 1901 S. Alamo. The meeting times will be from 2:00 to 4:00 PM on the following dates:

Thursday- September 4, 2008 (Residential Code Changes)

Thursday- September 18, 2008 (Commercial Code Changes)

Bring your 2008 National Electrical Code and join us.

For more information, contact senior inspectors, John Raney, (210) 215-7768, [john.raney@sanantonio.gov](mailto:john.raney@sanantonio.gov) or George Moreno, (210) 260-3905, [george.moreno@sanantonio.gov](mailto:george.moreno@sanantonio.gov)

## Bonding CSST Gas Piping Systems

### Corrugated Stainless Steel Tubing Bonding:

CSST gas piping systems are commonly installed in residential dwelling units and are allowed on commercial installations within the City of San Antonio. During 2007, manufacturers of this product introduced a new requirement in their manufacturer's instructions that called for a direct bonding connection from an approved point on their gas system to the grounding electrode system of the structure. This requirement is more stringent than required by 250.104 (B) of the 2005 NEC for bonding other metal piping systems, such as gas piping systems. The NEC allows these systems to be bonded indirectly by use of the equipment grounding conductor to the metal frame of the gas supplied equipment.

The manufacturer's instructions have introduced a new requirement that provides for a level of protection that was felt necessary by them to offer protection from indirect lightning strikes. The CSST gas piping system must have this additional requirement met in order to fulfill the product warranty provided by its manufacturer's.

Information Bulletin 134 was created to give information and guidance to our customers on what to expect in terms of inspections. Contractors and homebuilders have been working together in coordinating this additional manufacturer's requirement into their overall process. The bonding conductor as per the manufacturer's instructions is to be terminated at the service panel and thus needs to be coordinated through the electrical contractor.

You can view this information bulletin and others by visiting our [Development Services Department website](#).

For more information, contact senior inspectors, John Raney at (210) 215-7768; [john.raney@sanantonio.gov](mailto:john.raney@sanantonio.gov) or George Moreno (210) 260-3905; [george.moreno@sanantonio.gov](mailto:george.moreno@sanantonio.gov)

# Distributed Generation Systems (Photovoltaic Systems)

Technology rapidly growing

With the growing concerns about the future and security of the world's energy supply, renewable resources such as wind and solar power are becoming increasingly important. This field of study and the resulting industry have been rapidly growing and improving and are expected to become a significant part of the world's energy future. Our great city is definitely no exception; we have seen a steady increase in the installation of PV systems for both residential and commercial structures.

*Photovoltaic's* is a solar energy technology that uses unique properties of semiconductors to directly convert solar radiation into electricity. Electrical components, such as inverters, charge controllers, and disconnects, control and condition the DC power from the solar panels (array) and either direct it to DC loads or convert to AC power for use by AC loads.

The increased use of these systems can also be partially contributed to rebates offered to customers by CPS Energy. In order to qualify for the rebates and to be able to tie in with utility grid, the installation must meet all guidelines set out by CPS Energy. These guidelines along with other information can be found on the <http://www.cpsenergy.com/>

Prior to CPS Energy installing the PV meter and allowing tie in to their supply grid, the installation must first meet basic requirements set out by article 690 of the 2005 National Electrical Code and section 10-110 of Chapter 10, City Code. The current process requires plans to be submitted to DSD with the following information: one or three line diagram, list of electrical components including listing/certification and rating information, and information on the solar arrays that will need to be considered for structural purposes. Once plans are approved, an electrical contractor registered with DSD can obtain the necessary electrical permit and coordinate its installation and inspections. Only after this process has been completed with a final inspection approval by DSD will these installations be allowed to be energized in any manner.

Any questions can be directed to myself or to my two senior electrical inspectors, John Raney, [john.raney@sanantonio.gov](mailto:john.raney@sanantonio.gov) (210) 215-7768 or George Moreno, [george.moreno@sanantonio.gov](mailto:george.moreno@sanantonio.gov) (210) 260-3905.

## Town Hall Meeting (TDLR Compliance Division)

Town Hall Meeting:

Compliance division personnel from the Texas Department of Licensing and Regulation (TDLR) office have been personally invited to visit our city and give our local contractors and other industry personnel an opportunity to ask questions and voice concerns over State rules and regulations. There is much happening at the State level involving electrical licenses and proposed administrative rules and regulations and TDLR staff will be on hand to help answer just about any of these questions and concerns.

For example, some limited license categories have been introduced at the State level and are intended to regulate a specific area of our industry. Appliance installers is one of those limited license categories and allows these licensed individuals to install new appliances onto existing outlet locations. Come learn more about this and other license classifications and requirements.

TDLR staff and I hope that having this meeting can accomplish: 1) putting some faces to names; 2) finding out about electrical safety issues/concerns that may be specific to our area; 3) establishing working partnerships with local jurisdiction and TDLR staff; 4) answering any "hot topic" questions regarding state or local electrical requirements; and 5) provide additional education on the law and rules.

The Town Hall Meeting will be held on December 11, 2008 from 2:00 to 4:00 PM in the Board Room located on the 1st floor of our Development Services Building at 1901 S. Alamo St. Stop by and enjoy some refreshments and learn more about what is happening in your industry.

Any questions can be directed to myself or to my two senior electrical inspectors, John Raney, [john.raney@sanantonio.gov](mailto:john.raney@sanantonio.gov) (210) 215-7768 or George Moreno, [george.moreno@sanantonio.gov](mailto:george.moreno@sanantonio.gov) (210) 260-3905.